

WHAT IS CLAIMED IS:

1 1. A device for depositing a film onto a surface of a substrate, comprising:
2 a film material source for dispersing film material incident in the general direction of the
3 substrate surface; and
4 at least one collimator between the film material source and the substrate, the at least one
5 collimator having passages therein, wherein the passages are angled obliquely relative to the
6 substrate surface such that incident film material traveling toward the substrate in a trajectory which
7 is not substantially parallel to the oblique angle of the passages is blocked.

1 2. The device in accordance with claim 1 wherein the substrate has a circular profile,
2 and
3 wherein the passages of the collimator are angled in a circumferential direction of the
4 circular profiled substrate.

1 3. The device in accordance with claim 1 wherein the substrate has a circular profile;
2 and
3 wherein the passages of the collimator are angled in a radial direction of the circular profiled
4 substrate.

1 4. The device in accordance with claim 1, wherein a ratio of the height of the passages
2 to the depth of the passages is substantially uniform throughout the collimator.

1 5. The device in accordance with claim 2, wherein the angle of the passages with
2 respect to the substrate surface of the sheet of the collimator can be varied from about 0 to about
3 90°.

1 6. The device in accordance with claim 1 wherein the film material source is a target
2 constructed of the film material and particles are ejected from the target material by a sputtering
3 technique.

4 7. The device in accordance with claim 1 wherein the film material source is an
5 evaporation medium constructed of the film material and particles are dispersed from the
6 evaporation medium in an evaporation technique.

1 8. The device in accordance with claim 1, wherein the collimator can be electrically
2 floating, on earth or biasing.

1 9. The device in accordance with claim 1, wherein the collimator comprises a material
2 selected from the group consisting of a conductor material, an insulator material, or a
3 semiconductor material.

1 10. The device in accordance with claim 1 wherein the collimator comprises:
2 a support structure;
3 a plurality of sheets held in relative relation by the support structure and forming passages
4 there between.